

# PATENT ABSTRACTS OF JAPAN

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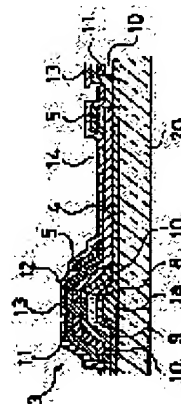
## (54) ACTIVE MATRIX LIQUID CRYSTAL DISPLAY DEVICE

### (57)Abstract:

PURPOSE: To prevent the display defect by the disclination of a reverse tilt by forming the device in such a manner that electrodes for additive capacity cover the outer peripheral and peripheral edge parts of picture element electrodes and are formed on a liquid crystal layer side with respect to the picture element electrodes.

CONSTITUTION: An active matrix substrate has an insulating substrate 20 consisting of glass, etc., and the picture element electrodes 4 arrayed in the form of a matrix on the substrate 20. The electrodes 5 for additive capacity are formed to cover the outer peripheral and peripheral edge parts of the picture element electrodes 4. The electrodes 5 for additive capacity are formed on the surface on the front surface side of the picture element electrodes 4, i.e. the surface on the liquid crystal layer side via the insulating layer 13. The adjacent electrodes 5 for additive capacity are respectively electrically connected and are connected to a counter electrode by using carbon, etc., so as to have the same potential as the potential of the counter electrode on the counter substrate. Then, the electric lines of force between both substrates are generated in the direction approximately perpendicular to the two substrates. The electric lines of force do not exist in the liquid crystal layer between the electrodes 5 for additive capacity and the counter electrode. The generation of the reverse tilt is obviated at the time of the rising of the liquid crystal molecules in this way and the display defect by the disclination is prevented.

*Electrode  
not dielectric*



## LEGAL STATUS

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